# Notice No.5

## Rules and Regulations for the Classification of Ships, July 2022

The status of this Rule set is amended as shown and is now to be read in conjunction with this and prior Notices. Any corrigenda included in the Notice are effective immediately.

Please note that corrigenda amends to paragraphs, Tables and Figures are not shown in their entirety.

### Issue date: December 2022

| Amendments to | Effective date | IACS/IMO implementation (if applicable) |
|---|---|---|
| Part 1, Chapter 1, Section 9 | Corrigendum | N/A |
| Part 1, Chapter 2, Section 2 | Corrigendum | N/A |
| Part 3, Chapter 5, Section 1 | Corrigenda | N/A |
| Part 5, Chapter 10, Section 2 | Corrigendum | N/A |
| Part 5, Chapter 11, Section 2 | Corrigendum | N/A |
| Part 5, Chapter 12, Section 5 | Corrigenda | N/A |
| Part 6, Chapter 1, Section 4 | Corrigenda | N/A |
| Part 6, Chapter 2, Section 24 | Corrigendum | N/A |

# Part 1, Chapter 1
# General Regulations

## ■ *Section 9*
## Sanctions Compliance

9.1 When a ~~ship~~ vessel has been operated in breach of applicable sanctions laws, or where LR cannot continue to provide services without being in breach of applicable sanctions laws, LR may withdraw or suspend class.

# Part 1, Chapter 2
# Classification Regulations

## ■ *Section 2*
## Character of classification and class notations

### 2.3 Class notations (hull)

2.3.14 **Class notations for CSR bulk carriers**. In general, CSR bulk carriers less than 150 m in length are to comply with the requirements of *Pt 4, Ch 7, 1.4 Class notation for CSR bulk carriers* and the *IACS Common Structural Rules (CSR)* and will be eligible for one of the following mandatory class notations:

In general, CSR bulk carriers equal to or greater than 150 m in length are to comply with the requirements of *Pt 4, Ch 7, 1.5 Class notation for non-CSR bulk carriers* and the ~~IACS Common Structural Rules (CSR)~~ *IACS Common Structural Rules (CSR)* and will be eligible for one of the following mandatory class notations:

| | |
|---|---|
| **BC-A, {holds a, b, … may be empty}** | This class will be assigned for bulk carriers designed to carry dry bulk cargoes of cargo density 1,0 tonne/m$^3$ and above with specified holds empty at maximum draught. |

# Part 3, Chapter 5
# Fore End Structure

## ■ *Section 1*
## General

### 1.6 Strengthening against bow flare slamming

1.6.5 The thickness of the side shell is to be not less than:

…

$h_S$ = bow flare slamming head, in metres, as defined in *Pt 3, Ch 5, 1.6 Strengthening against bow flare slamming ~~1.6.3~~ 1.6.4*

…

1.6.6 The scantlings of secondary stiffeners are not to be less than:

…

$h_S$ = bow flare slamming head, in metres, as defined in *Pt 3, Ch 5, 1.6 Strengthening against bow flare slamming ~~1.6.3~~ 1.6.4*

…

**Table 5.1.3 Buckling procedure for primary member web plating and web stiffener**

| Symbols |
|---|
| $h_S$ = equivalent bow flare slamming head, in metres, as defined in *Pt 3, Ch 5, 1.6 Strengthening against bow flare slamming ~~1.6.3~~ 1.6.4* |

# Part 5, Chapter 10
# Steam Raising Plant and Associated Pressure Vessels

■ *Section 2*
## Cylindrical shells and drums subject to internal pressure

### 2.1 Minimum thickness

2.1.2 The formula in *Pt 5, Ch 11, 2.1 Minimum thickness 2.1.1* is applicable only where the resulting thickness does not exceed half the internal radius, i.e. where ~~$R_o$~~ $t$ is not greater than ~~1,5~~ 0,5 $R_i$.

# Part 5, Chapter 11
# Other Pressure Vessels

■ *Section 2*
## Cylindrical shells and drums subject to internal pressure

### 2.1 Minimum thickness

2.1.2 The formula in *Pt 5, Ch 11, 2.1 Minimum thickness 2.1.1* is applicable only where the resulting thickness does not exceed half the internal radius, i.e. where ~~$R_o$~~ $t$ is not greater than ~~1,5~~ 0,5 $R_i$.

# Part 5, Chapter 12
# Piping Design Requirements

■ *Section 5*
## Plastic pipes

### 5.3 Design strength

5.3.2 The nominal internal pressure, $p$Ni, of the pipe is to be determined by the lesser of the following:

~~$p_{Ni} \leq 2,5\ p_{st}$~~ $p$Ni ≤ $p$st/2,5

~~$p_{Ni} \leq 4\ p_{lt}$~~ $p$Ni ≤ $p$lt/4

# Part 6, Chapter 1
# Control Engineering Systems

■ *Section 4*
## Unattended machinery space(s) – UMS notation

### 4.6 Fixed water-based local application fire-fighting systems

~~The minimum section modulus of webs and stiffening of steel pontoon secondary stiffeners is to be calculated in accordance with *Table 9.3.4 Secondary stiffener requirements* using the Scenario 1 structural design factor given in *Table 9.3.6 Structural design factors* and the Scenario 1 loads defined in *Table 9.3.7 Design load cases*.~~

~~4.6.2 The section modulus of webs and stiffening of aluminium pontoons is to be not less than that defined in *Pt 3, Ch 9, 4.6 Pontoon webs and stiffeners 4.6.1*, replacing $\sigma_o$ by $\sigma_a$, where $\sigma_a$ is defined in *Pt 3, Ch 2, 1.3 Aluminium*.~~

4.6.1 Where fixed water-based local application fire-fighting systems are installed, they are to satisfy the requirements of *Pt 6, Ch 1, 2.9 Fixed water-based local application fire-fighting systems*.

4.6.2 Fixed water-based local application fire-fighting systems are to be capable of automatic release in accordance with *SOLAS - International Convention for the Safety of Life at Sea*, *Chapter II-2 - Construction - Fire protection, fire detection and fire extinction, Part C - Suppression of fire*, *Regulation 10 - Fire fighting*.

# Part 6, Chapter 2
# Electrical Engineering

## ■ *Section 24*
## Hybrid electrical power systems

### 24.15 Hybrid electrical power system components – Distribution system

24.15.11 Active components may be used for the limitation of fault currents subject to verification in a real environment of the performance of the component under all normal and reasonably foreseeable abnormal operating and fault conditions and subject to establishment of effective surveillance and periodic test procedures during operation and maintenance in the ship's operating manuals to verify the component is capable of performing its intended function. An isolation device is to be provided within the component and this is to be tripped automatically in the event of the component operating. A risk assessment of the component is to be undertaken to a recognised standard that is acceptable to LR (e.g. ISO 31010, *Risk management – Risk assessment techniques*) and in accordance with *ShipRight Procedure* ~~*Assessment of Risk Based Designs* and associated annexes~~ *Risk Based Certification (RBC)*.

### 24.26 Power system development and integration – Risk assessment

24.26.3 Where the results of this formal method establish that new hazards or exist, the risk assessment study is to be undertaken to a recognised standard that is acceptable to LR (e.g. ISO 31010, *Risk management – Risk assessment techniques*) and in accordance with *ShipRight Procedure* ~~*Assessment of Risk Based Designs* and the associated annexes~~ *Risk Based Certification (RBC)*.

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Published by Lloyd’s Register Group Limited
*Registered office* (Reg. no. 08126909)
71 Fenchurch Street, London, EC3M 4BS
United Kingdom

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